REISSUE PATENT APPLICATION

775.2800

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue of: U.S. Patent No. 5,464,551) : }
Issued: November 7, 1995	: Examiner: Skane, C.
Inventor: GERBRAND DEETMAN	;
Assignee: Solutia Inc.	: Group Art Unit: 1751
Filing Date: July 2, 1997	;
For: STABILIZED PHOSPHATE ESTER-BASED FUNCTIONAL FLUID COMPOSITIONS	;) :

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

REVISED DECLARATION AND POWER OF ATTORNEY OF GERBRAND DEETMAN

Gerbrand Deetman, a citizen of the United States, residing at 11 River Valley Court, St. Charles, MO 63303, hereby declares as follows:

1. I was employed by Monsanto Company for more than 30 years since obtaining my B.S. from Washington University in St. Louis, MO. I am now retired and employed part-time as a consultant to Monsanto Company ("Monsanto"). During my employment with Monsanto I have worked in various areas of research on specialty fluids, including approximately 8 years in the research and development of Monsanto's Skydrol® functional fluid compositions, the subject matter of the present action.

make this declaration in support of Monsanto's application for reissue of U.S. Patent No. 5,464,551 I am the sole, original and first ("the '551 patent"). inventor of the invention described and claimed in the '551 patent, and in the foregoing specification of this reissue application. I have read and understand the application papers which constitute the contents of the specification and claims application, including the original reissue the specification of the '551 patent, original claims 1-89, and new claims 90-104 presented in the reissue application papers. I am advised these claims are now numbered 120-134 in the merged reexamination/reissue application presently pending before the Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this declaration, arose without any deceptive intention on the part of the applicant.

- 3. I believe that the '551 patent is partially inoperative because I claimed less than I had the right to claim, through error made without deceptive intent. The error and the lack of deceptive intent are more fully described in the following paragraphs and in the previously filed Declarations of Kenneth D. Goetz and Wendell W. Brooks.
- 4. At the time of my invention Monsanto marketed tri-butyl phosphate ester-based hydraulic fluids under its trademark, Skydrol[®]. At least partly because I became aware of potential toxicity issues regarding tri-n-butyl phosphate, I began researching replacement candidates for those phosphate

esters in Monsanto's functional fluid compositions. As part of that work, I discovered that isoalkyl substituted phosphate esters provided base stock formulations for hydraulic fluids that exhibited substantial performance improvements over previously known formulations and did not demonstrate the toxicity of tri-n-butyl phosphate esters. I also investigated several additive package formulations that would provide for a stable hydraulic fluid when run at higher temperatures for extended periods of time.

"Functional Fluid" was filed in my name that contained a description and experimental examples of phosphate ester-based functional fluid compositions and claims to the functional fluid compositions (i.e., base stock plus additive package). It was my understanding that the claims were directed to potential commercial embodiments of the invention, comprising both improved base stock formulation and the improved additive package. However, as demonstrated by the disclosure of that application my invention also relates to the use of the improved additive package in functional fluid compositions that did not contain the improved base stock formulation. For example, the original application, at page 9, lines 18-23, states:

[m] oreover, it has been found that the additive combinations of this invention are effective in enhancing the properties of base stock compositions previously known in the art or otherwise differing from the preferred base stock of the functional fluids of this invention.

I also note Table 1 and the accompanying text of the original

application at page 21, lines 27-29, which states "[t]he additive combination is also effective in combination with other ranges of base stock compositions as set forth below". Further, Figures 3 through 5 and 12, present in the original application, demonstrated the improved stability of formulations containing the improved additive package in combination with known phosphate ester base stock formulations when compared to prior art functional fluid compositions.

- 6. On July 28, 1993 a continuation-in-part of the 1992 application was filed in my name, which June 11, incorporated additional experimental data into specification to further demonstrate the patentability of the claimed functional fluid compositions. The additional data now appears in the '551 patent as Examples 12 and 13. In these Examples, Tables 11 and 12 show data on formulations 1 and 2, that supported the patentability of the broader invention by showing the unexpected increases in stability due to the additive package alone. In particular, in formulations 1 and 2 the improved additive package is combined with other known phosphate ester base stock formulations whereas the other compositions represent various embodiments of the preferred functional fluid compositions containing both the improved isoalkyl-substituted base stock and improved additive package of the claimed invention. In Table 11, formulations 1 and 2 show substantially improved thermal stability when compared to the prior art Skydrol[®] LD-4 formulation ('551 patent, Col. 37).
 - 7. The error necessitating reissue of the '551

patent is that the entire scope of my invention was not claimed, since no claim of the '551 patent expressly recites a functional fluid composition comprising the additive package of the invention in combination with phosphate ester base stock compositions other than those recited as "preferred" in the This error occurred in part because I did not '551 patent. discuss with the attorney prosecuting the application, Wendell W. Brooks, that the parent application and the new data added to the CIP showed more than the arguments made to the PTO to secure allowance of the then pending claims. As demonstrated above, on June 11, 1992, or at least on July 28, 1993, my invention, and its benefits, included not only the use of the additive package in combination with the substantially C4 and isoalkyl-substituted phosphate ester base stocks presently claimed but also in combination with other phosphate ester base stocks of the prior art. To correct this error, Claims 120 to 134 have been added to the foregoing application for reissue.

- 8. As demonstrated by the facts recited above and in the previously filed declarations of Kenneth D. Goetz and Wendell W. Brooks, the error occurred without deceptive intent.
- 9. I acknowledge the duty to disclose information that is material to the examination of the attached reissue application in accordance with 37 C.F.R. §1.56.
- 10. I hereby appoint the practitioners associated with the firm FITZPATRICK, CELLA, HARPER & SCINTO, Customer Number 05514 to prosecute this application and to transact all

business in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to the address associated with that Customer Number:

> FITZPATRICK, CELLA, HARPER & SCINTO 30 Rockefeller Plaza New York, N.Y. 10112 Telephone No. (212) 218-2100

The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that willful false statements or the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements my jeopardize the validity of the application or any patent issuing thereon.

February // 1999

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